REMARKS

The September 13, 2004 Office Action required a restriction from among:

The Office Action requires restriction from among the following:

Group I: Claims 1-8(a), 10, 16, 22-28, 30-33 and 39, drawn to a method of treatment comprising reducing the endogenous level or activity of retinoic aicd in a cell of a patient using an immunoglobulin, classified in class 424, subclass 130.1;

Group II: Claims 1-8(b-d), 10, 16, 22-28, 30-33 and 39, drawn to a method of treatment comprising reducing the endogenous level or activity of retinoic aicd in a cell of a patient using a peptide comprising a sequence from a retinal protein binding region of a retinal binding protein, classified in class 514, subclass 14;

Group III: Claims 1-8(e-f), 10, 16, 22-28, 30-33 and 39, drawn to a method of treatment comprising reducing the endogenous level or activity of retinoic aicd in a cell of a patient using an antisense molecule, classified in class 514, subclass 44;

Group IV: Claims 1-8(g), 10, 16, 22-28, 30-33 and 39, drawn to a method of treatment comprising reducing the endogenous level or activity of retinoic aicd in a cell of a patient using inhibitory molecules of the retinoic acid biosynthetic pathway, classified in class 568, subclass 448;

Group V: Claims 11-15, 17, 19 and 35-38, drawn to an immunoglobulin agent or antagonist of a retinal binding protein receptor capable of reducing the endogenous level or activity of retinoic acid in a cell of a patient, classified in class 424, subclass 130.1;

Group VI: Claims 11-15, 17, 19 and 35-38, drawn to a peptide agent or antagonist of a retinal binding protein receptor capable of reducing the endogenous level or activity of retinoic acid in a cell of a patient, classified in class 530, subclass 14;

Group VII: Claims 11-15, 17, 19 and 35-38, drawn to an antisense molecule agent or antagonist of a retinal binding protein receptor capable of reducing the

endogenous level or activity of retinoic acid in a cell of a patient, classified in class 536, subclass 24.5;

Group VIII: Claims 11-15, 17, 19 and 35-38, drawn to a known inhibitory molecule agent or antagonist of a retinal binding protein receptor capable of reducing the endogenous level or activity of retinoic acid in a cell of a patient, classified in class 568, subclass 448;

Group IX: Claim 18, drawn to a method of identifying a compound capable of lowering the endogenous level of retinoic acid in a cell comprising contacting a cell expressing a retinal binding protein receptor with a candidate compound and determining the level of retinoic acid in said cell, classified in class 435, subclass 7.1;

Group X: Claim 18, drawn to a method of identifying a compound capable of lowering the endogenous level of retinoic acid in a cell comprising determining the level of competitive binding of a candidate compound to a retinal binding protein receptor in the presence of retinal binding protein, classified in class 435, subclass 7.1; and,

Group XI: Claim 18, drawn to a method of identifying a compound capable of lowering the endogenous level of retinoic acid in a cell comprising exposing a cell expressing retinal dehydrogenase to a compound and determining if retinal levels in a cell are reduced, classified in class 435, subclass 7.4.

Additionally, an election of species was required wherein any of the following required by the claims of the elected group must be selected:

a single enzyme of the retinoic acid biosynthetic pathway listed in claims 6 and 7 that is to be antagonized by the method as claimed;

a single nuclear receptor response element listing in claim 32, the abnormal or overexpression of which corresponds with

a single disease, disorder or condition from claim 39, that is treated by the claimed method; and,

a single inhibitory molecule of an enzyme in the retinoic acid biosynthetic pathway.

In response to the Restriction Requirement and the Election of Species Requirement, Applicants elect, with traverse, claims 40-42 and the species psoriasis and carbenoxolone.

Applicants have cancelled herein claims 1-39, thereby rendering the Restriction Requirement as set forth in the September 13, 2004 Office Action moot. Accordingly, Applicants hereby elect new claims 40-42, as presented herein, for examination on the merits, and reconsideration and withdrawal of the Restriction Requirement is respectfully requested.

Regarding the Election of Species requirement, an election of species is required under M.P.E.P. §808.01(a) "where there is no disclosure of relationship between species (*see* M.P.E.P. §806.04 (b)), they are independent inventions and election of one invention" is required. In view of M.P.E.P. §803, however, when the generic claim includes sufficiently few species that a search and examination of all the species at one time would not impose a serious burden on the examiner, then a requirement for election is inappropriate.

It is respectfully submitted that Applicants should be allowed to select a small group of species for election, preferably as set forth in claim 40, as the Office Action has made no showing that searching more than one of the species would constitute an undue burden. Furthermore, Applicants verily believe that the small number of claims currently will ensure that there is no undue burden placed on the Examiner through the search and examination of claim 40 in its entirety.

Claim 40 sets forth a group of disease comprising psoriasis, acne vulgaris, actinic ketatosis, solar keratosis, squamous carcinoma *in situ*, ichthyoses, hyperkeratosis and disorders of keratinisation such as Darrier's disease, and a group of compounds comprising carbenoxolone, phenylarsine oxide, citral, 4-methylpyrazole, disulphiram and 3-mercaptopropionic acid.

Applicant respectfully submits that the diseases recited comprise a proper Markush grouping, in that each member shares a common "structural" feature of increased proliferation and decreased differentiation, together with the newly-found linking feature that each may be treated by inhibition of the retinoic acid biosynthetic pathway. Applicant further submits that the compounds recited comprise a proper Markush grouping, in that each member shares a common utility of being an inhibitor of the retinoic acid biosynthetic acid pathway. Applicants verily

believe that the search and examination of the diseases and compounds listed in claim 40 would not constitute an undue burden, and request that the Examiner consent to examine claim 40 in its entirety.

In the event that the Examiner believes that claim 40 should still be subject to an Election of Species, Applicants request that claim 41 be examined with the groups of diseases and compounds set forth therein. Claim 41 sets forth a group of diseases comprising psoriasis, acne vulgaris, and hyperkeratosis, and a group of compounds comprising carbenoxolone, phenylarsine oxide, citral, 4-methylpyrazole, disulphiram and 3-mercaptopropionic acid.

Applicant submits that these diseases are so closely-linked, all being skin diseases associated with hyperproliferation, and specifically all showing a high level of keratinocyte hyperproliferation, that they would be viewed by one skilled in the art as having a common aetiology. Furthermore, as described above, the compounds recited comprise a proper Markush grouping, in that each member shares a common utility of being an inhibitor of the retinoic acid biosynthetic acid pathway. Applicants verily believe that the search and examination of the diseases and compounds listed in claim 41 would not constitute an undue burden, and request that the Examiner consent to examine claim 41 in its entirety if it is determined that claim 40 would still be subjected to an Election of Species.

In the event that the Examiner believes that claim 41 should still be subjected to an Election of Species, Applicants request that claim 42 be examined. Claim 42 contains only the disease psoriasis, and sets forth a group of compounds comprising carbenoxolone, phenylarsine oxide, citral, 4-methylpyrazole, disulphiram and 3-mercaptopropionic acid. As described before, Applicants verily believe that the search and examination of the compounds set forth in claim 42 would not be unduly burdensome on the Examiner, and thereby requests that claim 42 be examined in its entirety if it is determined that claims 40 and 41 would still be subjected to an Election of Species.

Should the Examiner believe that election of a single disease and a single species still be required, Applicants elect, with traverse, psoriasis and carbenoxolone.

Accordingly, reconsideration and withdrawal of the Election of Species requirement is respectfully requested, such that claim 40 is examined in its entirety.

In summary, enforcing the present Election of Species requirements would result in inefficiencies and unnecessary expenditures by both the Applicants and the PTO, as well as

extreme prejudice to Applicants (particularly in view of GATT, whereby a shortened patent term may result in any divisional applications filed). Election has not been shown to be proper, especially since it has been shown that the requisite showing of serious burden has not been made given the small number of claims currently pending and the proper markush groups present in the claims. All of the preceding, therefore, mitigate against an Election of Species.

CONCLUSION

Reconsideration and withdrawal of the restriction requirement and election of species and an early and favorable examination on the merits is respectfully requested in view of the remarks herein.

Respectfully submitted,

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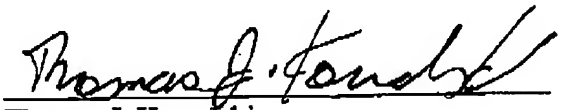
By: 

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